



Julie's Seed Needs

Julie just moved into her dream house. It's on a big piece of property with woods at the back. There is a 70-foot long driveway and two-car detached garage. It borders two other properties. The Frank's live next-door and the Formica's land borders along 50 feet of her property line in the back. The only work that needs to be done is putting in grass. The entire property was torn-up and needs to be re-seeded. Use the map of Julie's property. Follow the directions and answer the following questions to help Julie figure out how much grass seed she will need to purchase and what it will cost.

1. Julie's property is shaped like a trapezoid. Cut this trapezoid into two simpler shapes. What two shapes did you make?

2. What are the dimensions of these two shapes?

3. Find the areas of the two shapes that you created.

4. Add these areas together to find the total area of Julie's property.

5. Does she need to cover the entire area of her property with grass seed? Why or why not?

6. Which areas do not need to be covered with seed?

7. Find the areas that do not need to be covered.

8. Add these areas together to find the total that does not need to be covered.

9. Subtract this from the area of her property to find the square feet that she needs to cover.

10. If one ounce of grass seed will cover 8 square feet, how many pounds of grass seed does Julie need to purchase?
(Remember: there are 16 ounces in one pound)

11. 5-pound bags of grass seed cost \$37.50. How many bags must Julie purchase and how much will it cost?
